

Figure 1A

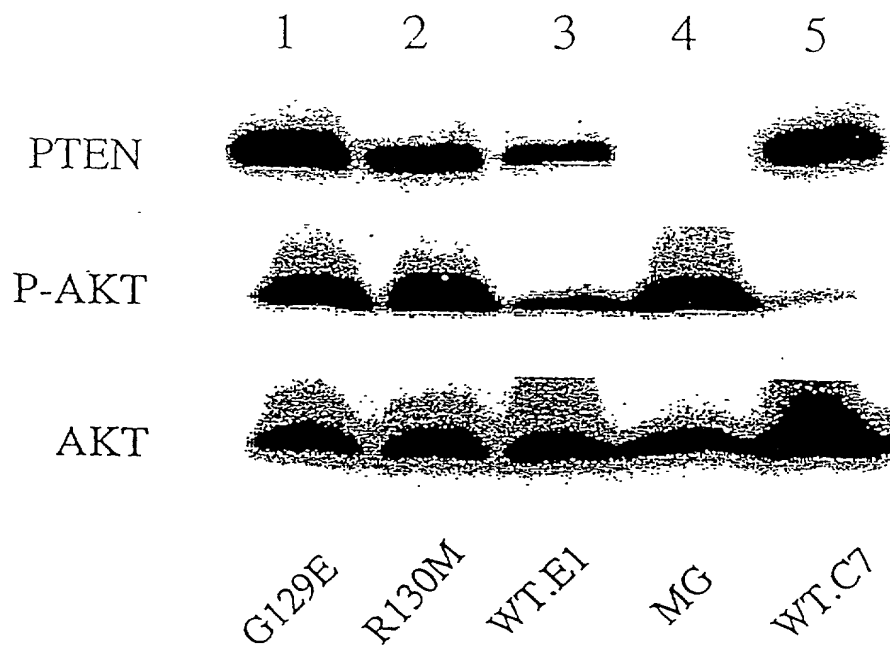


Figure 1B

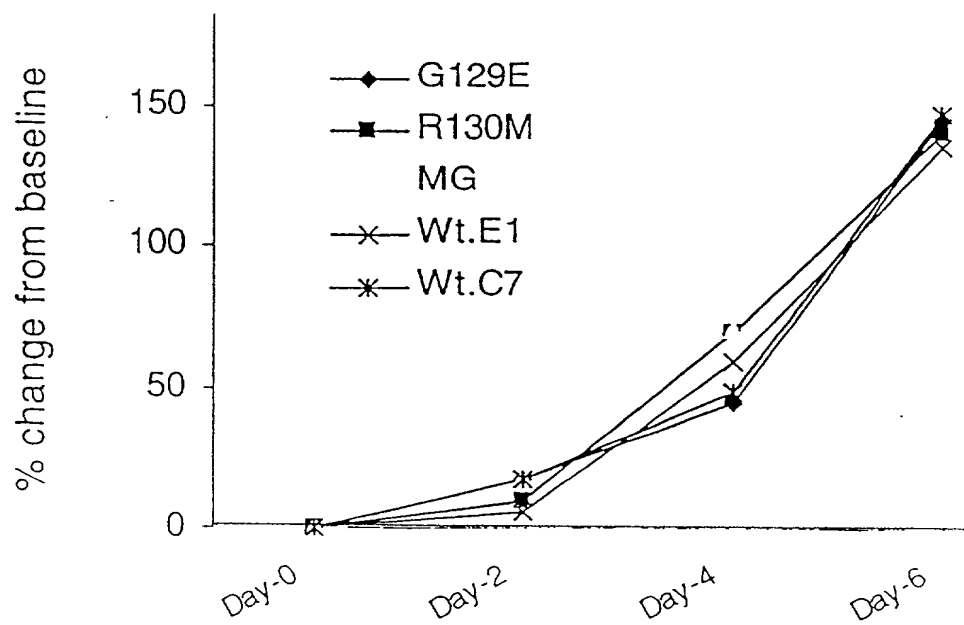


Figure 2A

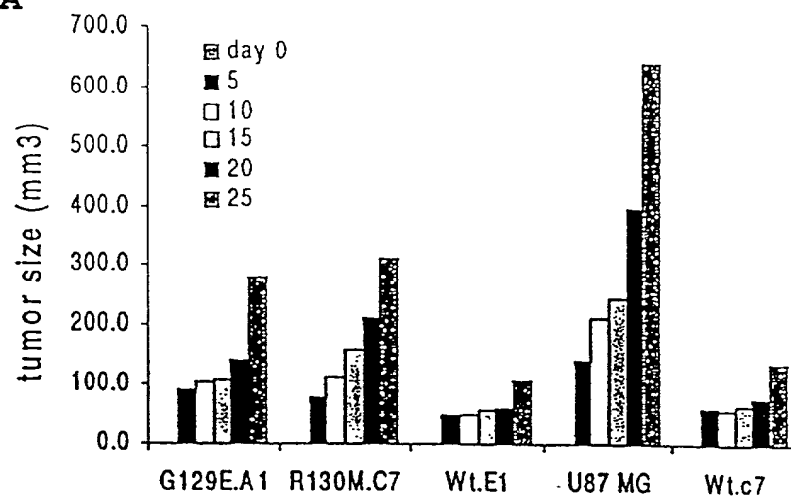


Figure 2B

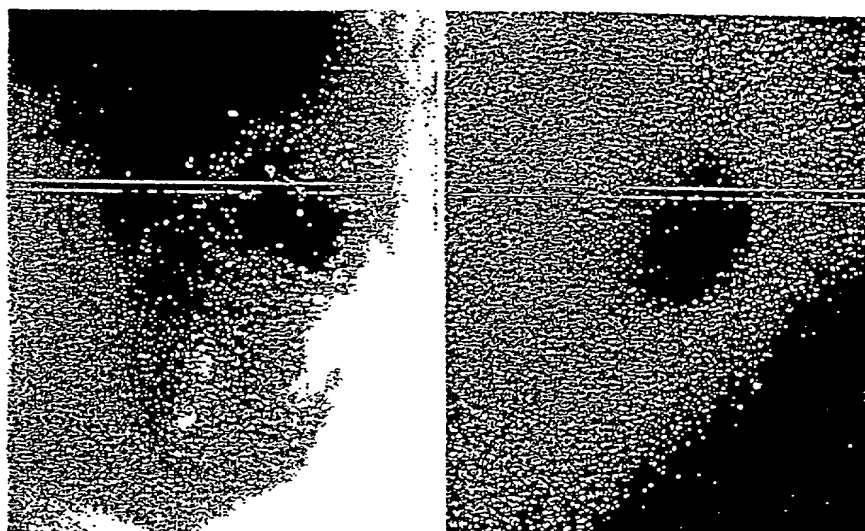


Figure 2C

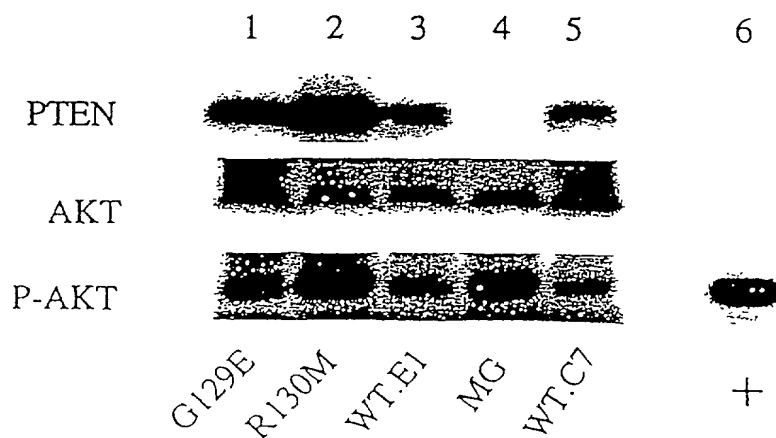


Figure 3A

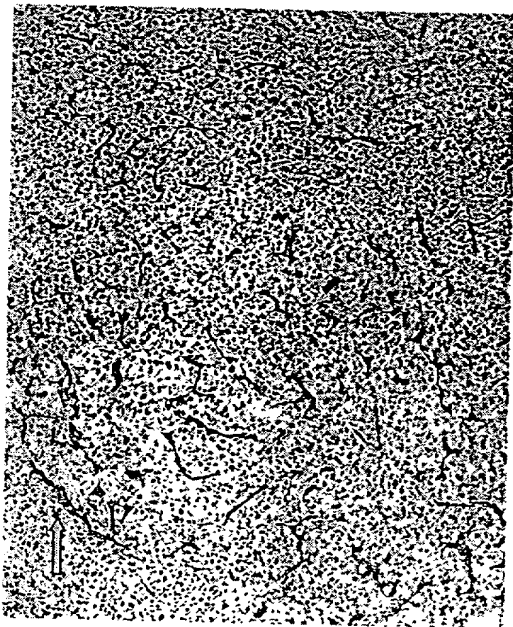


Figure 3B

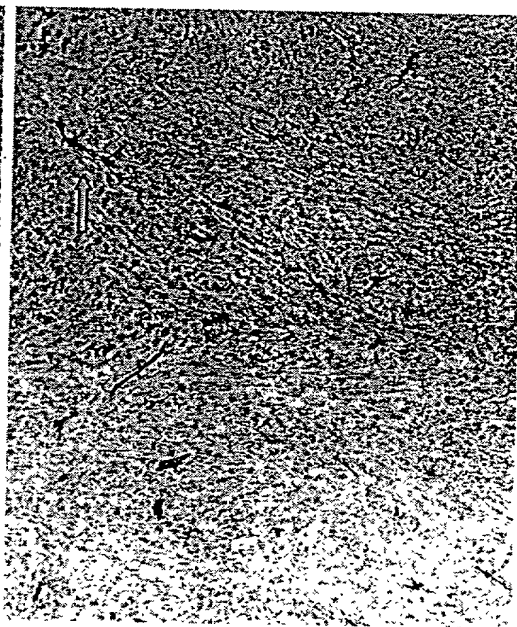


Figure 3C

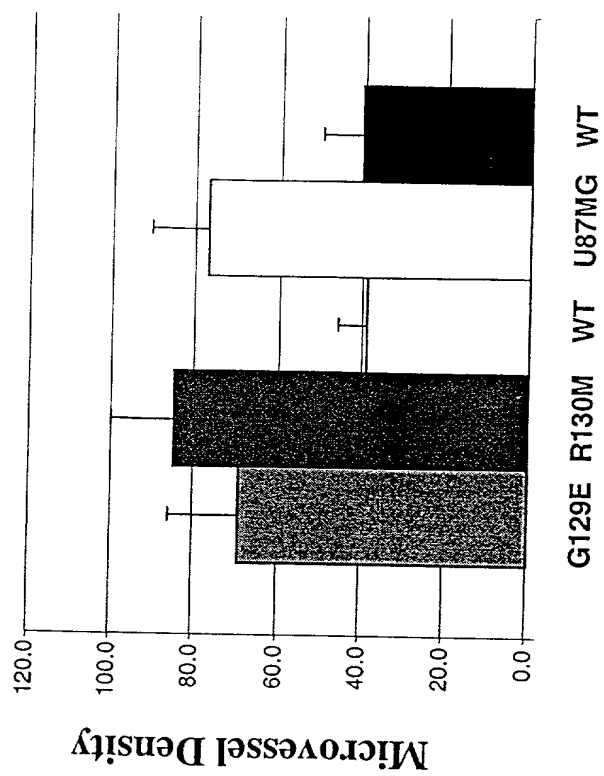


Figure 3D

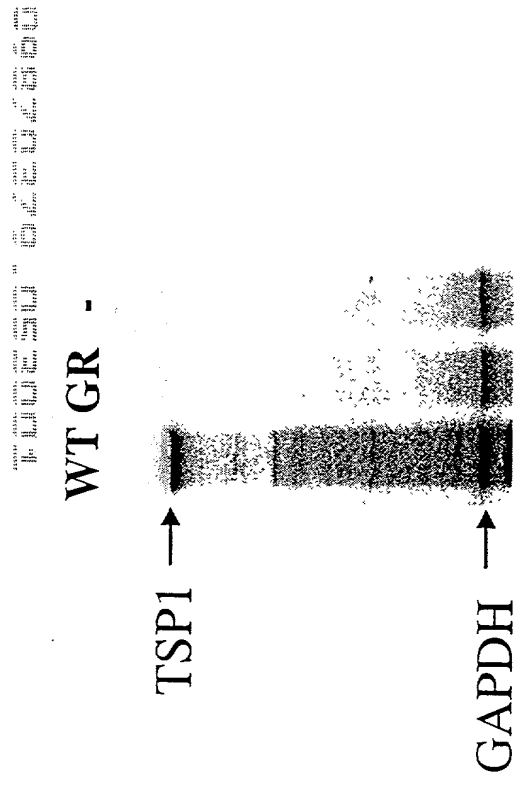


Figure 3E

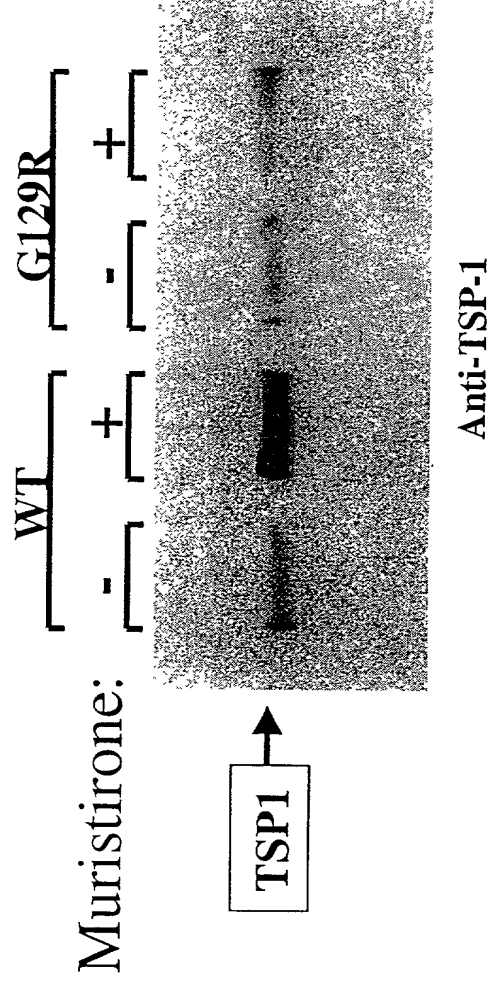


Figure 4

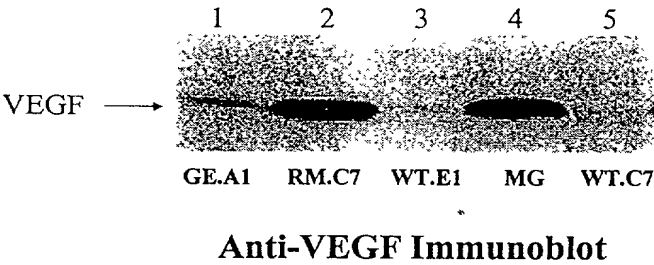


Figure 5A



Figure 5B

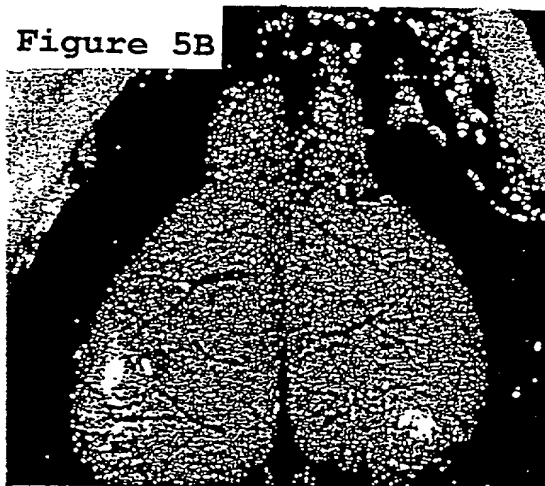


Figure 5C

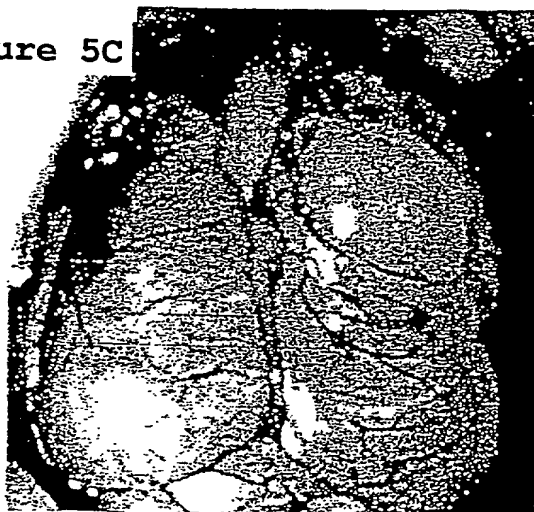


Figure 5D

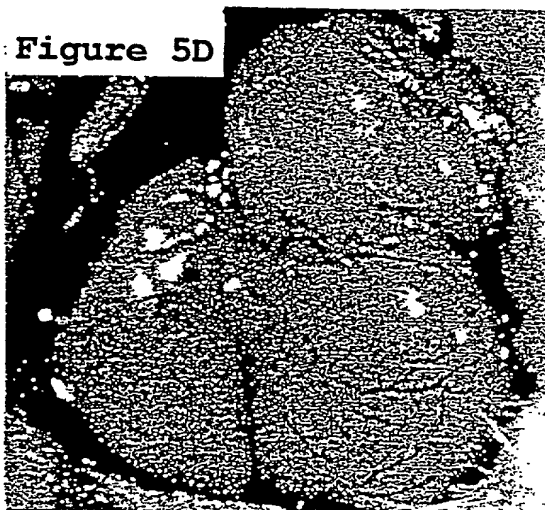


Figure 5E

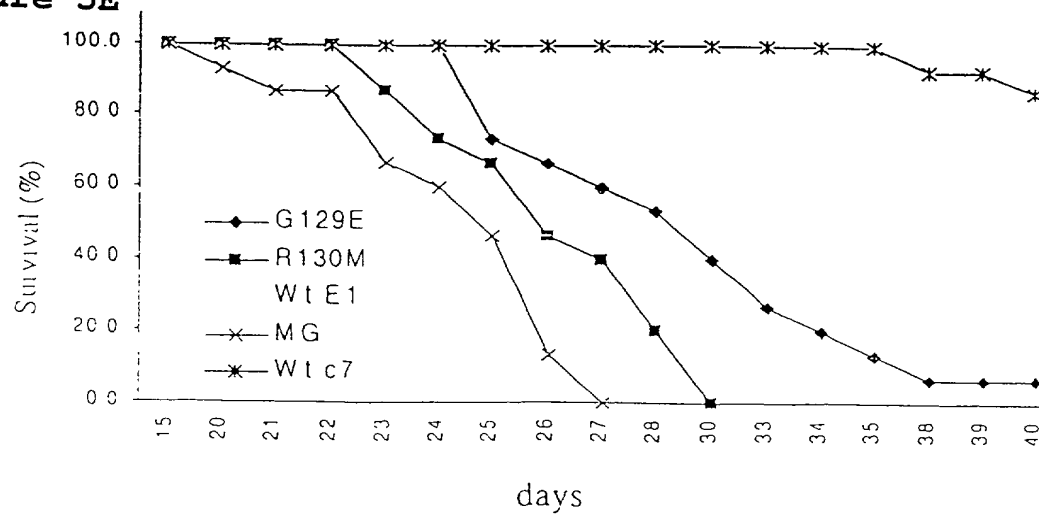


Figure 7

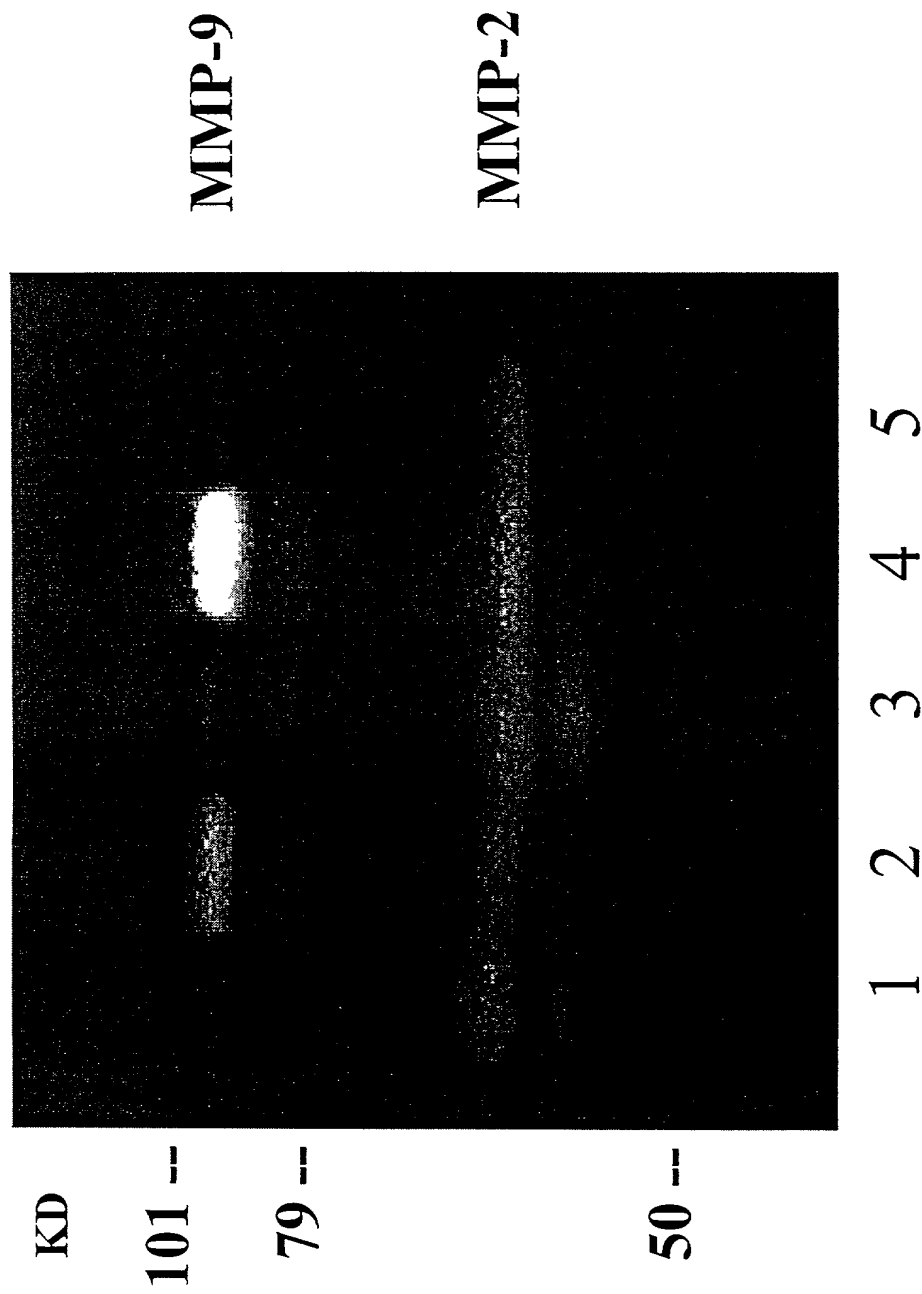


Figure 8

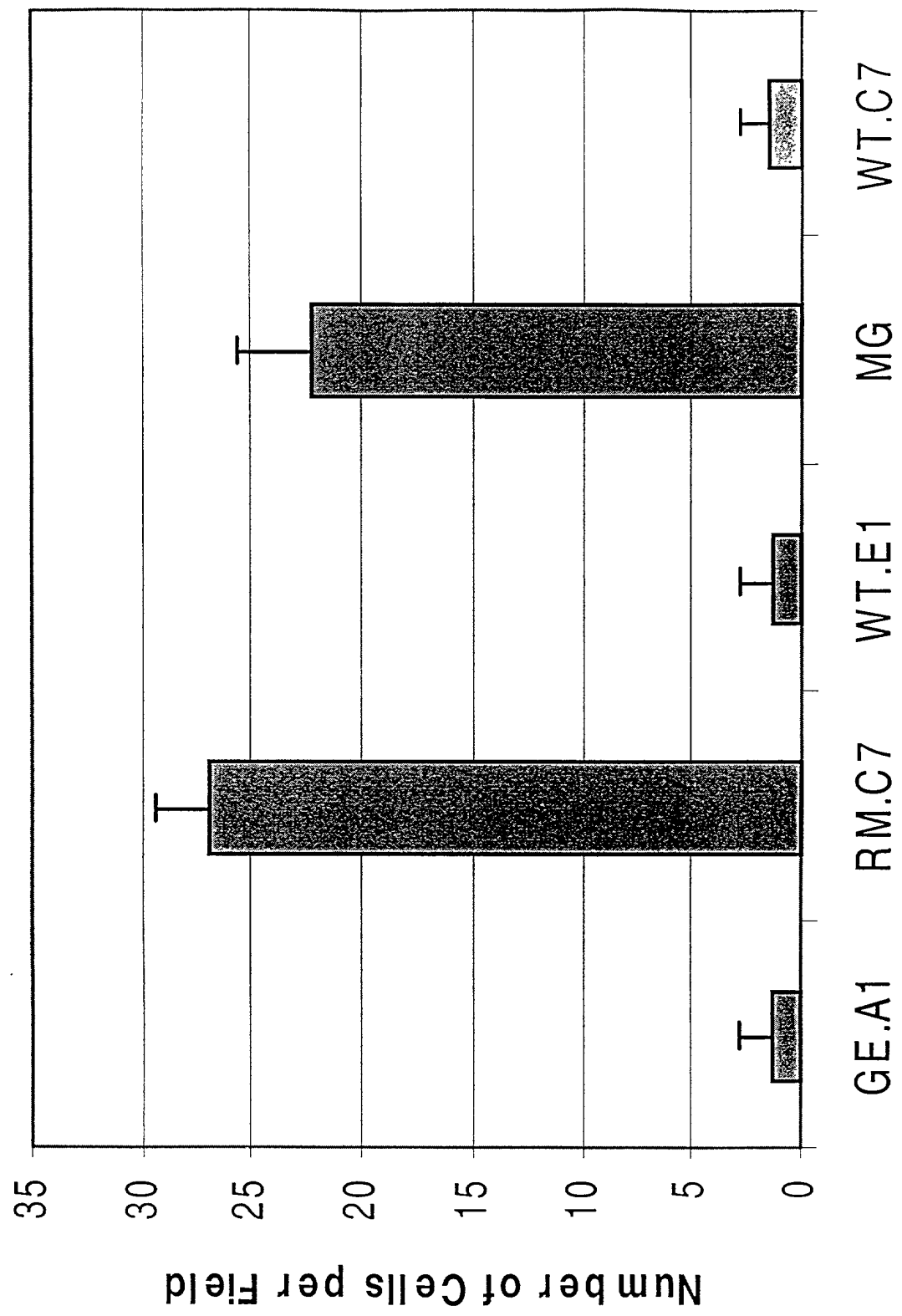


Figure 9A

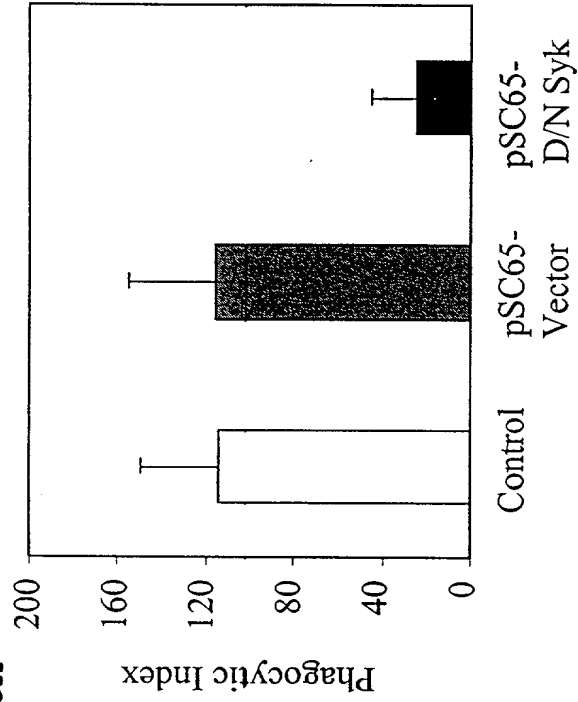


Figure 9B

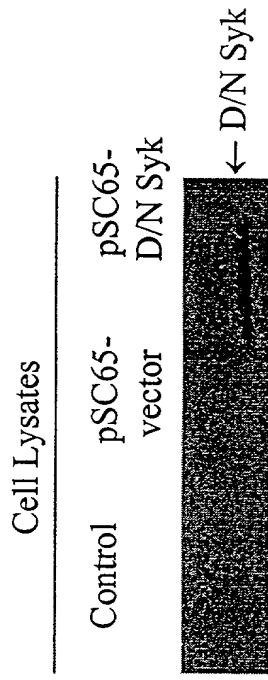


Figure 10A

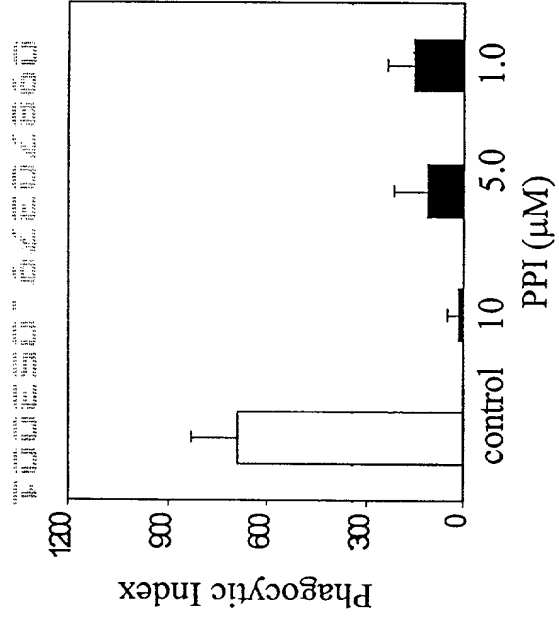


Figure 10B

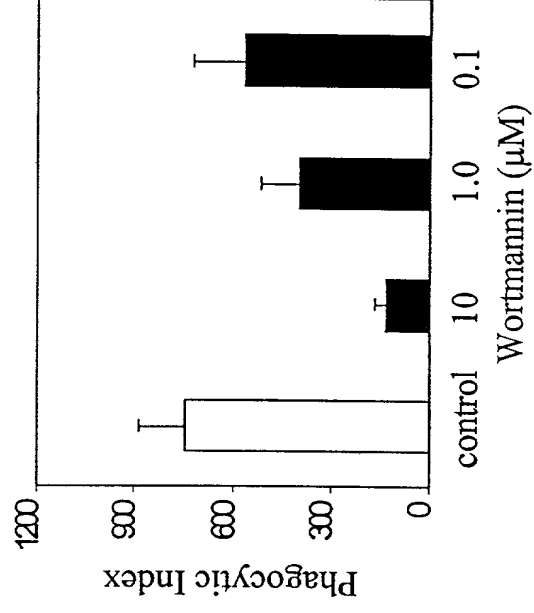


Figure 11A

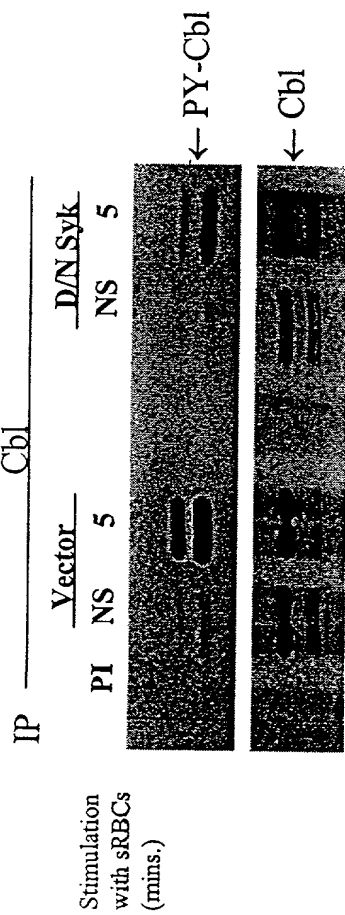


Figure 11B

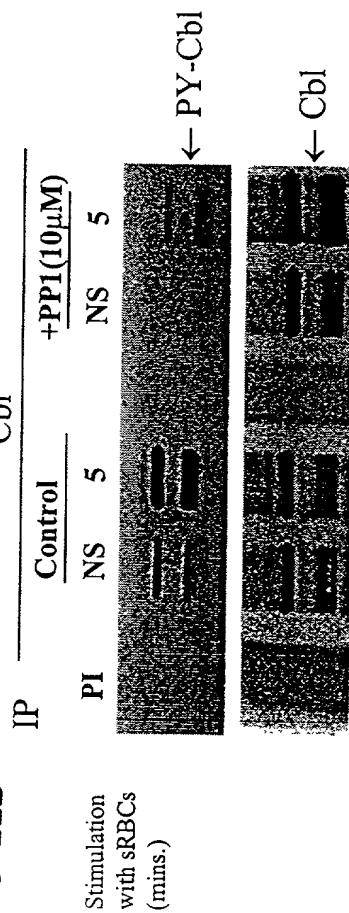


Figure 12

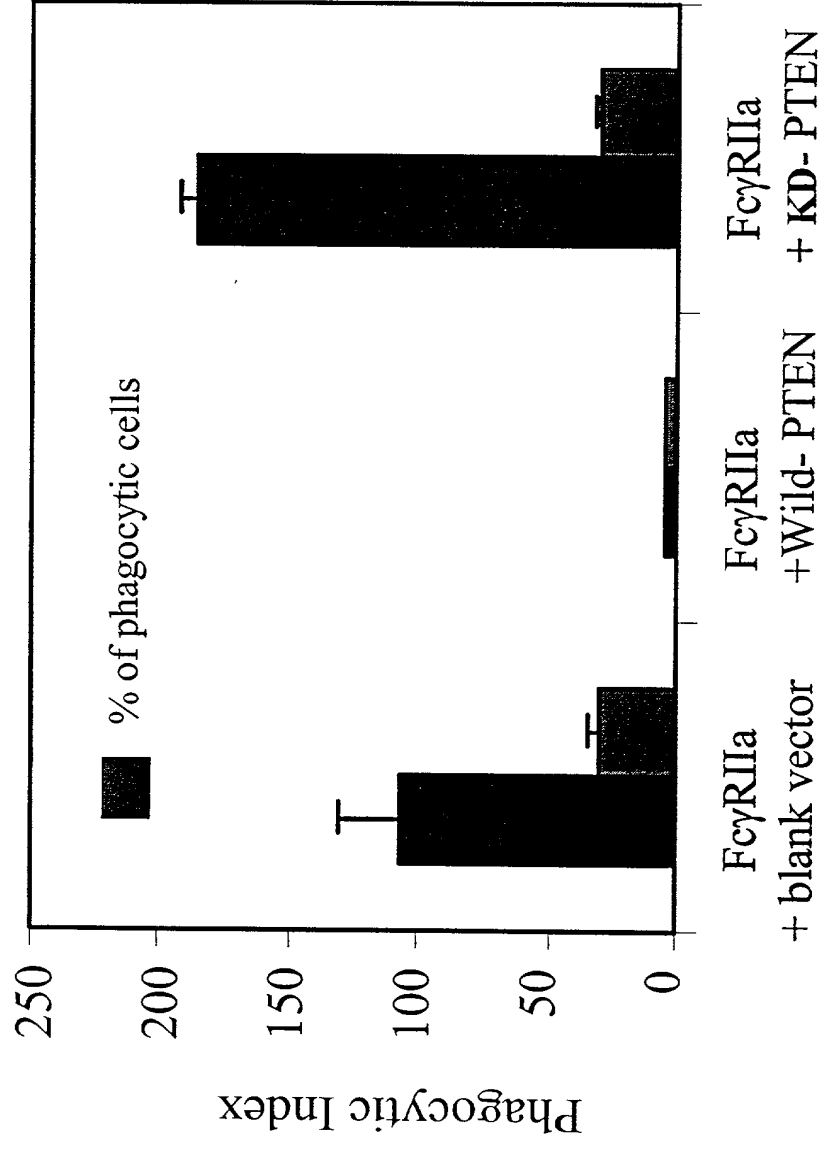


Figure 13

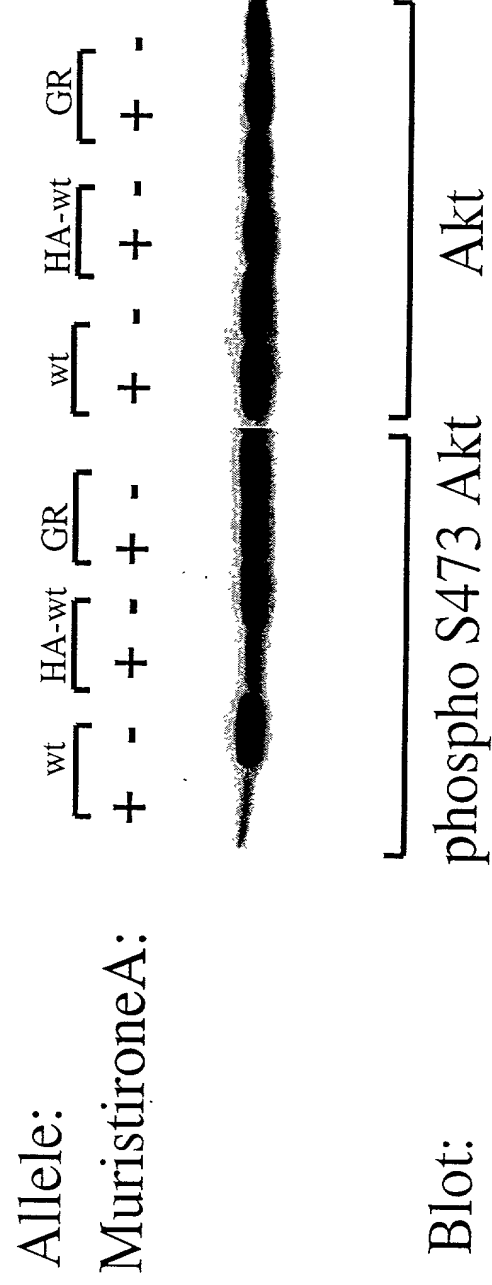


Figure 14

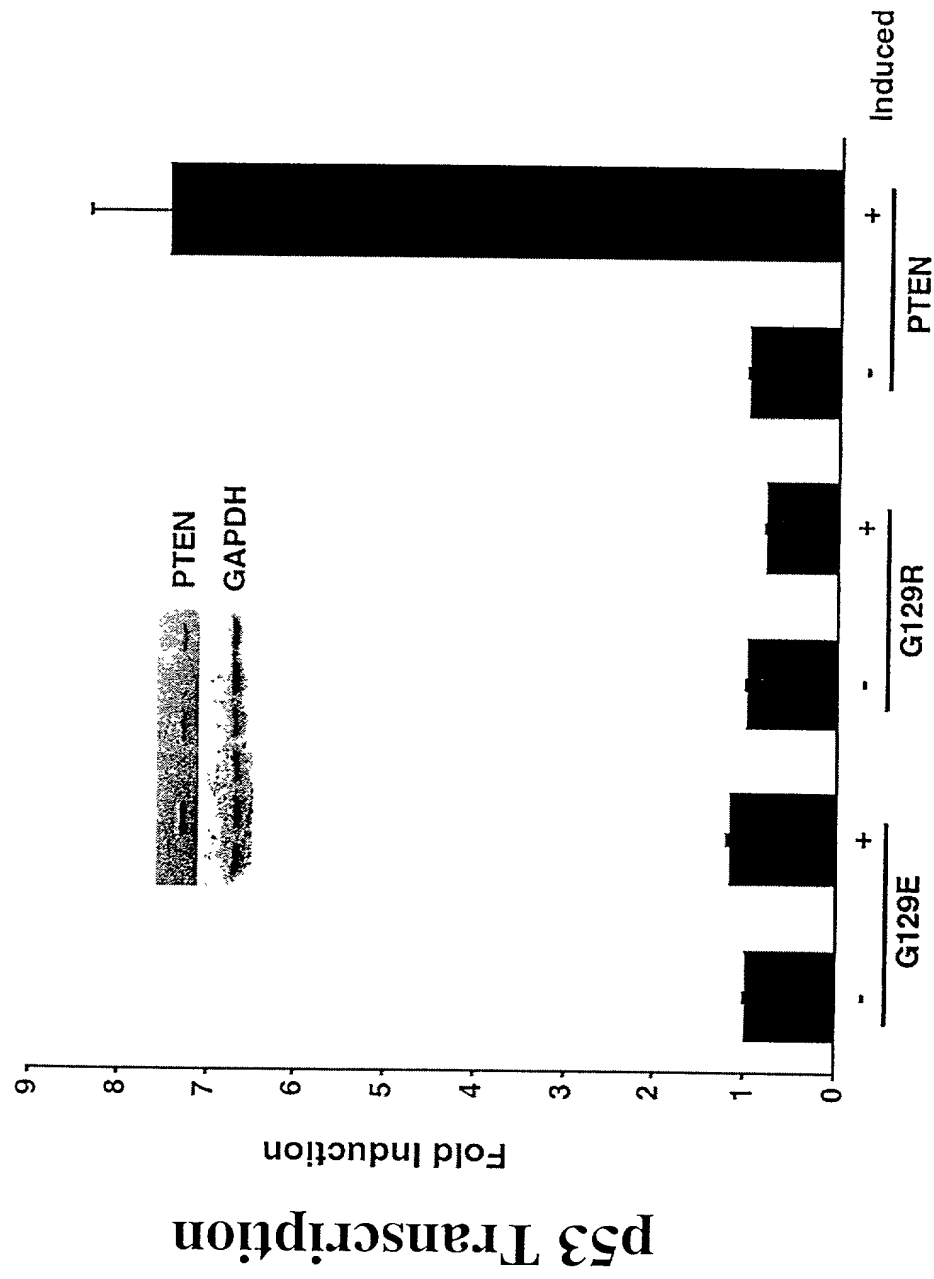


Figure 15

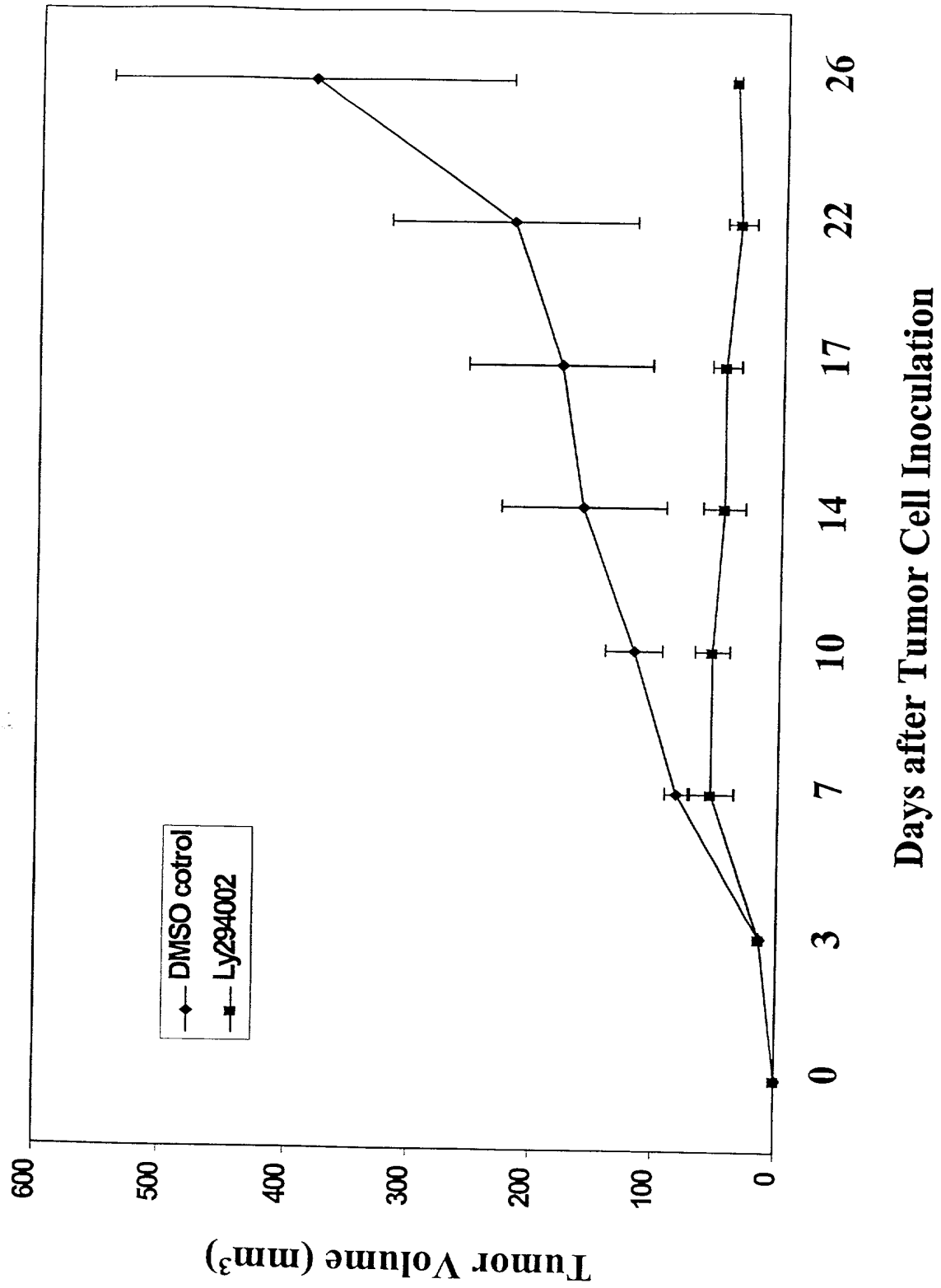


Figure 16

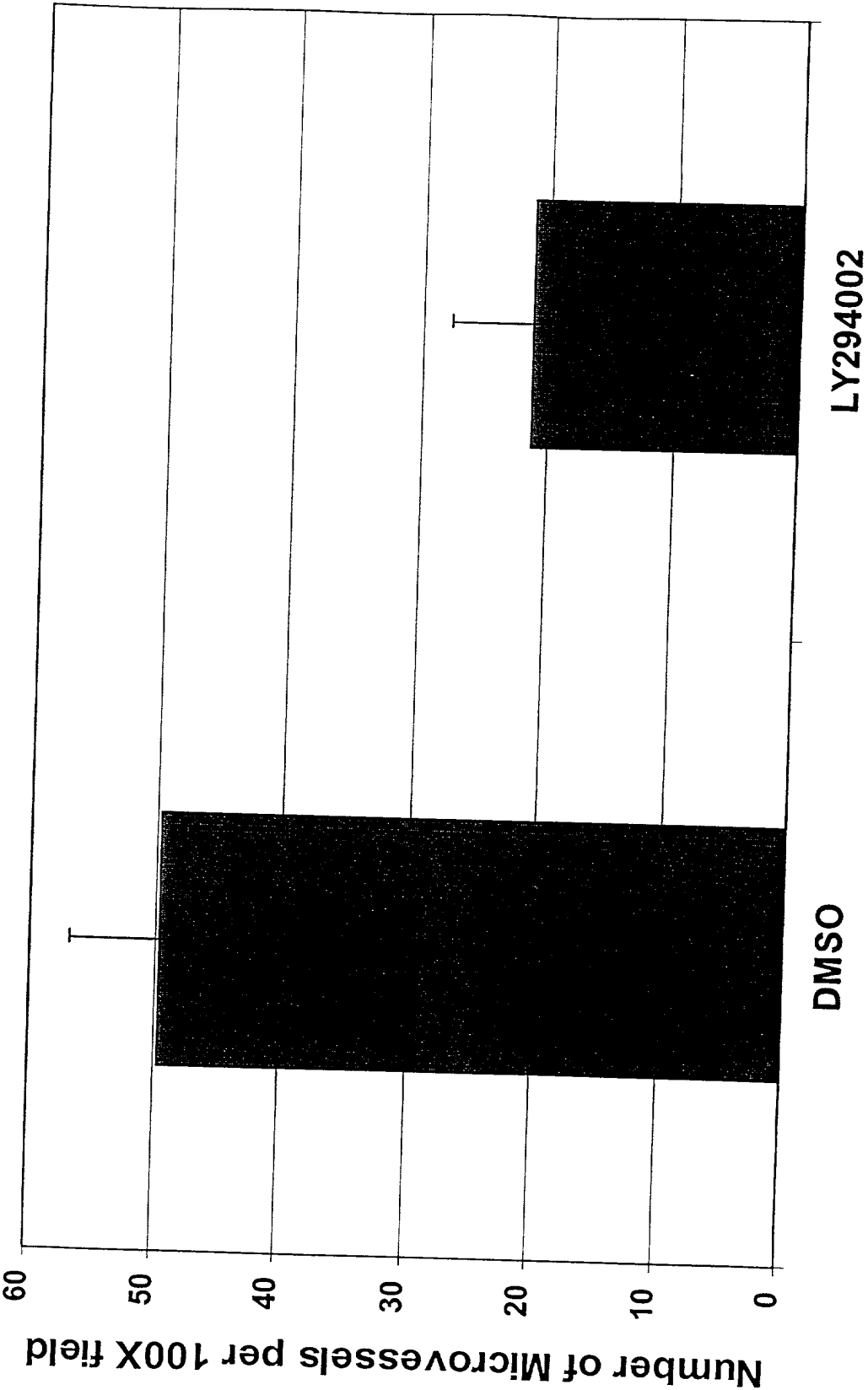


Figure 17

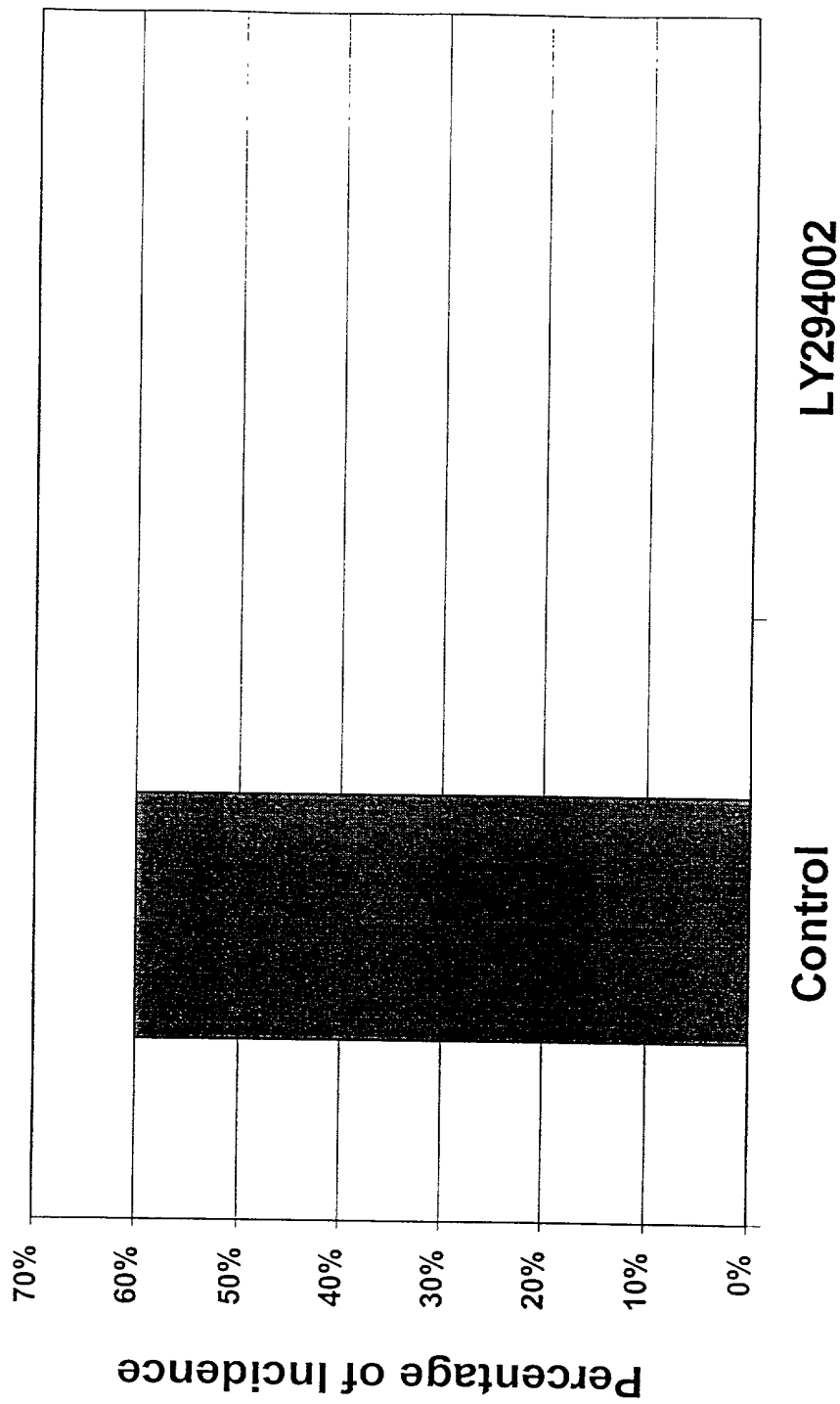


Figure 18

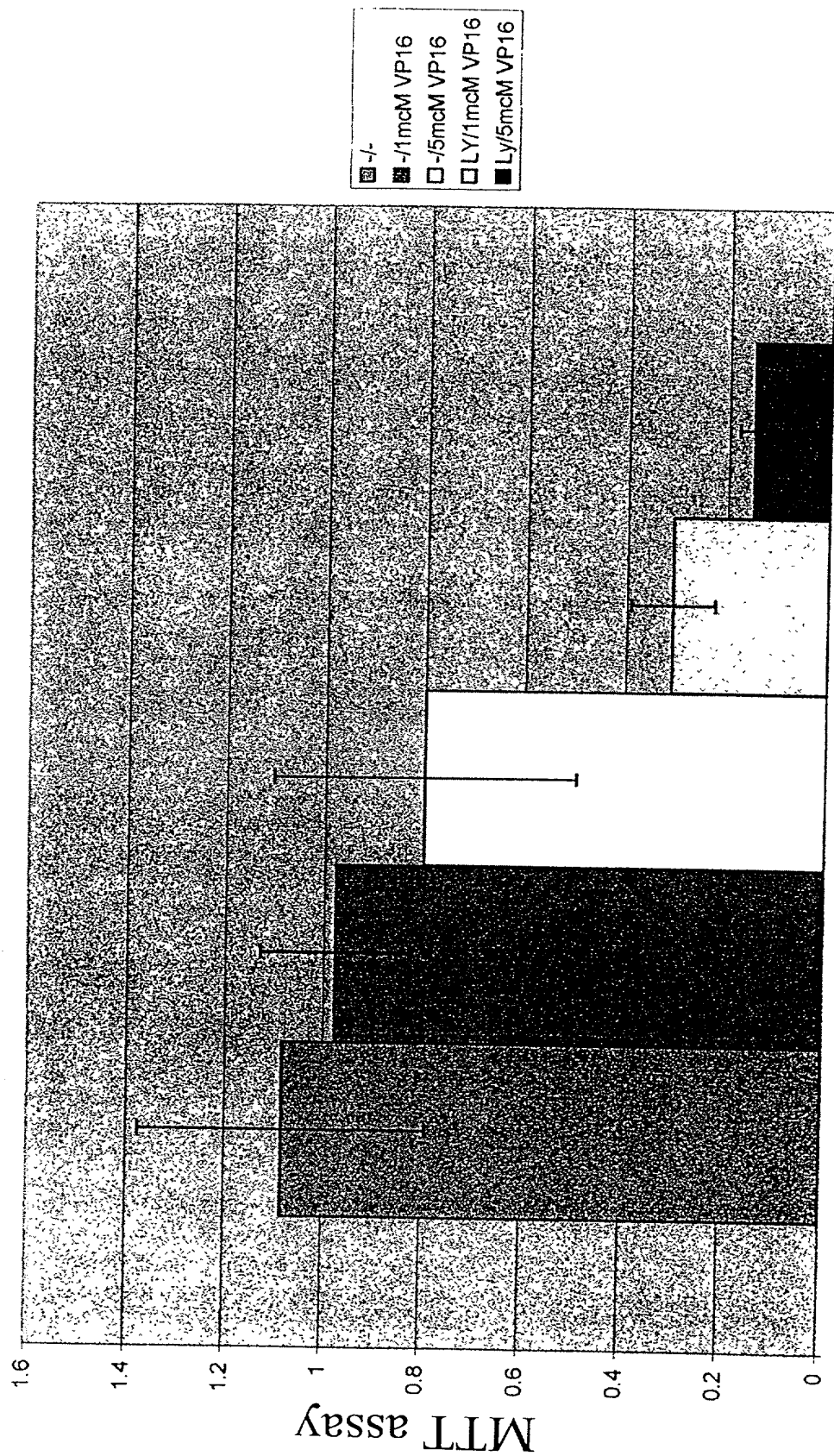


Figure 19

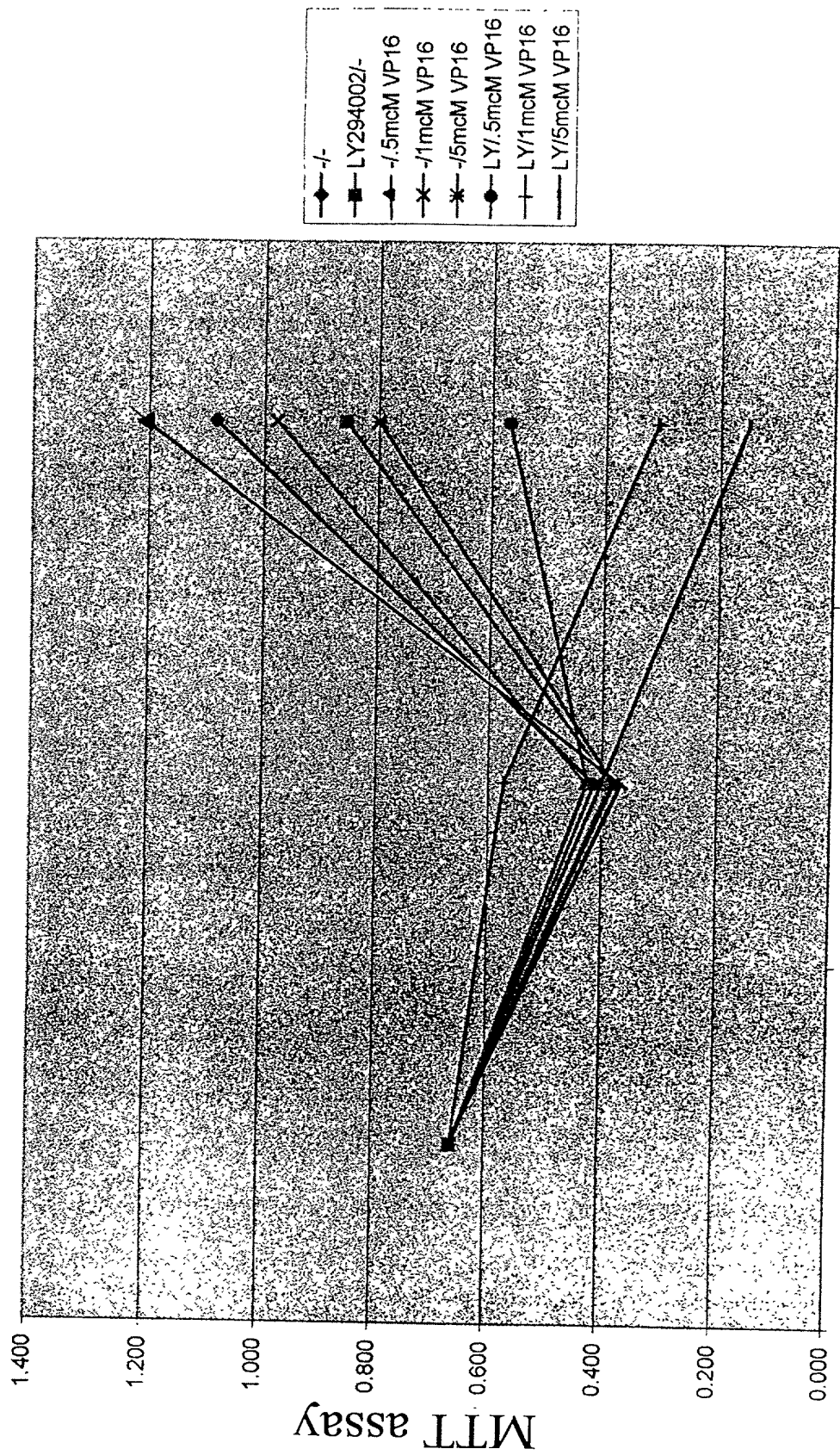
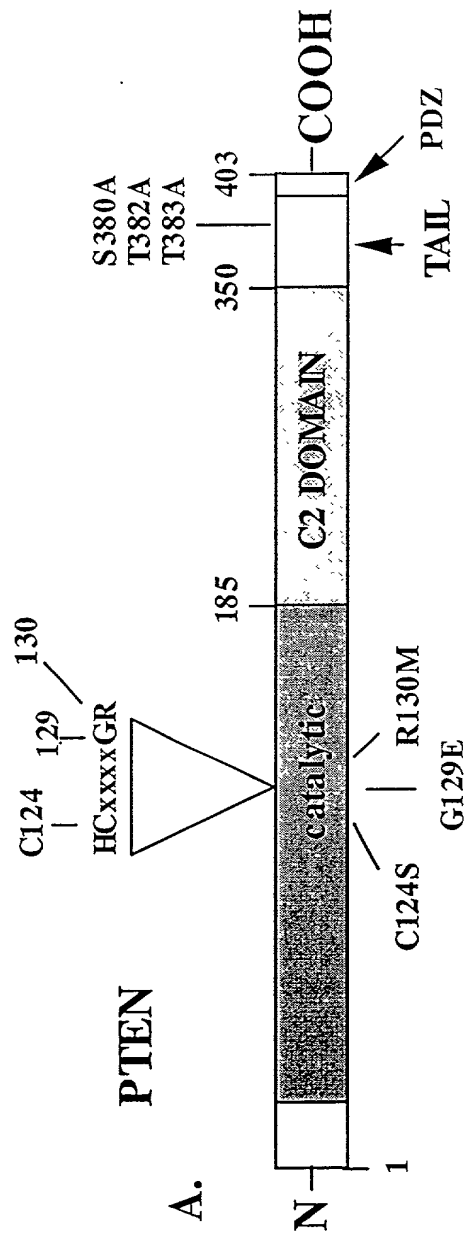


Fig. 20A



1760 1770 1780 1790 1800
 ACAAAATGTTTCACTTTTGGGTAAATACGTTCTTCATACCAGGACCAGAG
 TGTTTTACAAAGTGAAAACCCATTTATGCAAGAAGTATGGTCCTGGTCTC
 D K M F H F W V N T F F I P G P E>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>ClaI
 |
 >BsiXI
 |
 >BsiQI >TaqI
 | |

1810 1820 1830 1840 1850
 GAAACCTCAGAAAAAGTGGAATGGAAGTC'TTTGTGATCAGGAAATCGA
 CTTTGGAGTCTTTTTTACCTTTTACCTTCAGAAACACTAGTCCTTTAGCT
 E T S E K V E N G S L C D Q E I D>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>RsaI
 |

1860 1870 1880 1890 1900
 TAGCATTTGCAGTATAGAGCGTGCAGATAATGACAAGGAGTATCTTGTAC
 ATCGTAAACGTCATATCTCGCACGTCTATTACTGTTTCCTCATAGAACATG
 S I C S I E R A D N D K E Y L V>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1910 1920 1930 1940 1950
 TCACCCTAACAAAAACGATCTTGACAAAGCAAACAAAGACAAGGCCAAC
 AGTGGGATTGTTTTTGTAGAACTGTTTCGTTTGTTCCTGTTCCGGTTG
 L T L T K N D L D K A N K D K A N>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1960 1970 1980 1990 2000
 CGATACTTCTCTCCAAATTTTAAGGTGAACTATACTTTACAAAAACAGT
 GCTATGAAGAGAGGTTTAAAATCCACTTTGATATGAAATGTTTTGTCA
 R Y F S P N F K V K L Y F T K T V>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

2010 2020 2030 2040 2050
 AGAGGAGCCATCAAATCCAGAGGCTAGCAGTTCAACTTCTGTGACTCCAG
 TCTCCTCGGTAGTTTAGGTCTCCGATCGTCAAGTTGAAGACACTGAGGTC
 E E P S N P E A S S S T S V T P>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>BsiQI
 |

2060 2070 2080 2090 2100
 ATGTTAGTGACAATGAACCTGATCATTATAGATATTCTGACACCACTGAC
 TACAATCACTGTTACTTGGACTAGTAATATCTATAAGACTGTGGTGACTG
 D V S D N E P D H Y R Y S D T T D>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>BscCI
 |

2110 2120 2130 2140 2150
 TCTGATCCAGAGAATGAACCTTTTGATGAAGATCAGCATTACAAAATTAC

Fig. 20B (continued)

CTTCTGCCATCTCTCTCCTCTTTTCTTCAGCCACAGGCTCCCAGACAT
GAAGACGGTAGAGAGAGAGGAGGAAAAAGAAGTCGGTGTCCGAGGGTCTGTA

M>

>

>EcoRV

960 970 980 990 1000
GACAGCCATCATCAAAGAGATCGTTAGCAGAAACAAAAGGAGATATCAAG
CTGTCGGTAGTAGTTTCTCTAGCAATCGTCTTTGTTTTCTCTATAGTTC
T A I I K E I V S R N K R R Y Q>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>TaqI

1010 1020 1030 1040 1050
AGGATGGATTTCGACTTAGACTTGACCTATATTTATCCAAATATTATTGCT
TCCTACCTAAGCTGAATCTGAACTGGATATAAATAGGTTTATAATAACGA
E D G F D L D L T Y I Y P N I I A>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>PstI

1060 1070 1080 1090 1100
ATGGGATTTCTGTCAGAAAGACTTGAAGGTGTATACAGGAACAATATTGA
TACCCTAAAGGACGTCTTTCTGAACTTCCACATATGTCCTTGTATAACT
M G F P A E R L E G V Y R N N I D>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

1110 1120 1130 1140 1150
TGATGTAGTAAGGTTTTTGGATTCAAAGCATAAAAACCATTTACAAGATAT
ACTACATCATTTCCAAAACCTAAGTTTCGTATTTTTGGTAATGTTCTATA
D V V R F L D S K H K N H Y K I>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>PstI

1160 1170 1180 1190 1200
ACAATCTATGTGCTGAGAGACATTATGACACCGCCAAATTTAACTGCAGA
TGTTAGATACACGACTCTCTGTAATACTGTGGCGGTTTAAATTGACGTCT
Y N L C A E R H Y D T A K F N C R>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

1210 1220 1230 1240 1250
GTTGCACAGTATCCTTTTGAAGACCATAACCCACCACAGCTAGAACTTAT
CAACGTGTCATAGGAAAACCTTCTGGTATTGGGTGGTGTGATCTTGAATA
V A Q Y P F E D H N P P Q L E L I>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

>BglII

1260 1270 1280 1290 1300
CAAACCTTCTGTGAAGATCTTGACCAATGGCTAAGTGAAGATGACAATC
GTTTGGGAAGACACTTCTAGAACTGGTTACCGATTCACTTCTACTGTTAG
K P F C E D L D Q W L S E D D N>
___HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC___>

Fig. 20B

1310 1320 1330 1340 1350
 ATGTTGCAGCAATTCACCTGTAAAGCTGGAAAGGGACGGACTGGTGTAAATG
 TACAACGTCGTTAAGTGACATTTTCGACCTTTCCCTGCCTGACCACATTAC
 H V A A I H C K A G K G R T G V M>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1360 1370 1380 1390 1400
 ATTTGTGCATATTTATTGCATCGGGGCAAATTTTAAAGGCACAAGAGGC
 TAAACACGTATAAATAACGTAGCCCCGTTTAAAAAATTTCCGTGTTCTCCG
 I C A Y L L H R G K F L K A Q E A>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1410 1420 1430 1440 1450
 CCTAGATTTTTATGGGGAAGTAAGGACCAGAGACAAAAAGGGAGTCACAA
 GGATCTAAAAATACCCCTTCATTCCTGGTCTCTGTTTTTCCCTCAGTGT
 L D F Y G E V R T R D K K G V T>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1460 1470 1480 1490 1500
 TTCCAGTCAGAGGCGCTATGTATATTATTATAGCTACCTGCTAAAAAAT
 AAGGGTCAGTCTCCGCGATACATATAATAATATCGATGGACGATTTTTTA
 I P S Q R R Y V Y Y Y S Y L L K N>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1510 1520 1530 1540 1550
 CACCTGGATTACAGACCCCGTGGCACTGCTGTTTCACAAGATGATGTTTGA
 GTGGACCTAATGTCTGGGCGACCGTGACGACAAAGTGTTCTACTACAAACT
 H L D Y R P V A L L F H K M M F E>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1560 1570 1580 1590 1600
 AACTATTCCAATGTTTCAGTGGCGGAACCTTGCAATCCTCAGTTTGTGGTCT
 TTGATAAGGTTACAAGTCACCGCCTTGAACGTTAGGAGTCAAACACCAGA
 T I P M F S G G T C N P Q F V V>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

1610 1620 1630 1640 1650
 GCCAGCTAAAGGTGAAGATATATTCCTCCAATTCAGGACCCACGCGGCGG
 CGGTGCGATTTCCACTTCTATATAAGGAGGTTAAGTCCTGGGTGCGCCGCC
 C Q L K V K I Y S S N S G P T R R>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>RsaI

1660 1670 1680 1690 1700
 GAGGACAAGTTCATGTACTTTGAGTTCCTCAGCCATTGCCTGTGTGTGG
 CTCCTGTTCAAGTACATGAACTCAAGGGAGTCGGTAACGGACACACACC
 E D K F M Y F E F P Q P L P V C G>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

>EcoRV

1710 1720 1730 1740 1750
 TGATATCAAAGTAGAGTTCTTCCACAAACAGAACAAGATGCTCAAAAAGG
 ACTATAGTTTCATCTCAAGAAGGTGTTTGTCTTGTCTACGAGTTTTTCC
 D I K V E F F H K Q N K M L K K>
 ____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

Fig. 20B (continued)

AGACTAGGTCTCTTACTTGGAAAACTACTTCTAGTCGTAAGTGTTTAATG
S D P E N E P F D E D Q H S Q I T>
____HOMOLOG OF HUMAN MUTATED IN MULTIPLE ADVANC____>

2160
AAAAGTCTGA
TTTTCAGACT
K V *>

Fig. 20B (continued)